

Atty. Docket No.2003-0058-01
 USSN 10/672,182

IN THE SPECIFICATION:

On page 20, lines 5, 9-10, please amend the following paragraph as follows:

“as shown in FIG. 15 may be replaced with rotated “V” shaped slots 60 in which the one side 60’ of the “V” lies in essentially the vertical plane and the other side 60’’ lies at an angle to the horizontal. The respective one sides 60’ of the respective “V”[?] s 60 together form the side walls of a crown portion 62 of the electrode, e.g., a cathode 64. The rotated “V”[?] s may be filled with a suitable faster eroding material than that of the cathode 64, e.g., a material containing Pb, e.g., a Pb solder, while the cathode 64 may be made, e.g., of oxygen free copper (“OFC”) copper, e.g., annealed to obtain a maximum or nearly maximum grain size, as such annealing is known in the art. The “sidewalks” formed by the “V”[?] s may be formed by placing the material for the sidewalks, e.g., the Pb solder in the rotated “V”[?] s in molten form or melting it into the “V”[?] s, allowing it to harden and then machining it down to the contour of the cathode 64.”

On page 48, please amend the Abstract as follows:

ABSTRACT OF THE DISCLOSURE

Fluorine gas discharge laser electrodes and electrode systems [~~are disclosed~~] that may comprise a plurality of current return tangs extending for less than the respective length of the second elongated gas discharge electrode. In addition[₁] ~~disclosed are electrodes [that]~~ may comprise a first discharge shaping magnet mounted in a first elongated gas discharge electrode and a second discharge shaping magnet mounted in a second elongated gas discharge electrode. ~~This may also comprise at least one of the first and second gas discharge electrodes has imbedded therein a first and a second auxiliary field creating magnet.~~ ~~[[a]][A]~~ ~~also disclosed~~ is an electrode [that] may comprise a crown straddling the centerline axis between the pair of side walls and the pair of end walls, comprising a first material, forming at least a portion of the discharge region of the electrode and a pair of elongated high erosion regions on either side of the crown comprising a second material with a relatively higher erosion rate during gas discharge than that of the first material. ~~Also disclosed are~~

Atty. Docket No.2003-0058-01
USSN 10/672,182

~~electrodes that may comprise a first insert in the electrode body comprising an electrically conductive material having a different coefficient of thermal conductivity than the electrode body. Also disclosed are electrodes that may have a thin film of semi-conductive material coating at least the discharge footprint of the gas discharge electrode, or at least a portion of the discharge region covered with a pre-formed reef having generally uniform pore size and distribution, and methods of making such coatings or reef. Also disclosed is a method of forming an electrode by diffusion bonding a first piece of a first material to a second piece of a second material utilizing a diffusion bonding catalyst between the first piece of material and the second piece of material during the diffusion bonding step and machining the bonded pieces to form an electrode.~~